



ISS crew testing Canadarm2 for ground control

Mission to Pluto to scout surface, atmosphere



▲ **ISS Update:** The Expedition 7 crew, Commander Yuri Malenchenko and NASA ISS Science Officer Ed Lu, wound up last week with a Canadarm2 session that could lead to operation of the Station's

robotic arm by controllers on the ground without crew participation. Lu successfully performed task the ground cannot yet do – operating the latching end effector and initiating joint motion, for example. Results will be used in validation of the concept and in determining software, hardware or procedural changes that would be needed for arm control from the ground. Information on the crew's activities on the Space Station, future launch dates and Station sighting opportunities from anywhere on Earth is available at: <http://spaceflight.nasa.gov/>.



▲ **ELV Update:** NASA has chosen the Atlas V expendable launch vehicle (left), provided by Lockheed Martin Commercial Launch Services Inc., as the launch system for the Pluto New Horizons mission. The Pluto mission is scheduled for launch in January 2006. The mission is a scientific investigation to obtain the first reconnaissance of Pluto-Charon, a binary planet system. New Horizons would

seek to answer key scientific questions regarding the surfaces, atmospheres, interiors, and space environments of

Pluto and Charon using imaging, visible and infrared spectral mapping, ultraviolet spectroscopy, radio science, and in-situ plasma sensors.

◆ **Education Opportunity** – Webster University's Space Coast campus is offering a master of science in computer science/distributed systems, a master of arts in management and an MBA program this fall. Classes start Aug. 16. Enroll now. Individuals who are interested can register by calling 449-4500.

◆ **Training Opportunity** – Kennedy Space Center is offering "Straight Talk on Preventing Sexual Harassment Training" to employees on a first-come, first-serve basis with Dr. Fred Soto in the KSC Training Auditorium July 29 and July 30. A training session will be held for managers/ supervisors/leads July 29, from 8:30 to 11:30 a.m., or July 30, from 1 to 4 p.m. A training session will be held for employees on July 29, from 1 to 3 p.m., or July 30, from 9 to 11 a.m. For further information, contact Cindy Gooden in the KSC Equal Opportunity Office at 867- 9170.

◆ **NASA Science** – A new kind of glass pane containing liquid crystal droplets can guide and manipulate beams of light. NASA-supported researchers are exploring the physics of these panes, which might have applications ranging from improving the Internet to discovering new planets. Read the full story at http://science.nasa.gov/headlines/y2003/25jul_colloids.htm.

◆ **Did You Know?** Spaceport Super Safety & Health Day 2003 is scheduled for Oct. 15. This annual event was initiated at KSC in 1998 to increase awareness of the importance of safety and health among the KSC workforce.